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| EXAMINER |
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TATE, CHRISTOPHER ROBIN

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| ART UNIT | PAPER NUMBER |
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1655

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08/16/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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|------------------------------|--|-------------------------------------|--|
| Office Action Summary | Application No. 10/575,007 | Applicant(s) ZHANG ET AL. | |
| | Examiner Christopher R. Tate | Art Unit 1655 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>0406</u> . | 6) <input type="checkbox"/> Other: ____. |

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DETAILED ACTION

Claims 1-10 are presented for examination on the merits.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 5-10 are rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1-10 are rendered exceedingly vague and indefinite for the following reasons:

In claim 1, the phrase "An antioxidant of bamboo leaves" (line 1) is unclear - e.g., is this vague, ambiguous phrase simply defining a collection of bamboo leaves which together act as an

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antioxidant, or is this phrase attempting to define a composition having antioxidant activity which comprises an effective amount of an extract obtained from bamboo leaves (or is this phrase attempting to define something else)?

In addition, claim 1 recites the limitation "the chemical structures" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim 2 is rendered vague and indefinite because it is replete with narrative vague limitations (as are claims 3-10 - too numerous to individually mention) which are not clearly defined including the following: what is meant by the phrase "wherein said antioxidant is a complex mixture with synergistic effects (e.g., a mixture of what, synergistic for what effects?); the phrase "the main active ingredient of the antioxidant are flavones, lactones, and phenolic acids" is grammatically incorrect and confusing (i.e., the term "the main active ingredient" appears to be defining a singular ingredient, however the phrase "are flavones, lactones, and phenolic acid" appears to be defining a combination of active ingredients therein); it is unclear as to what the phrase "and the representative compounds includes..." is actually defining (e.g., is the list of compounds recited thereafter representative of the compounds within the main active ingredient, within the overall antioxidant, or representative of something else?, also the plural phrase "representative compounds includes" is grammatically incorrect and, thus, confusing).

In claim 3, it is unclear as to what the percentages recited therein are based on/relative to (e.g., are the recited percentages by weight, by volume, or something else of the overall antioxidant product?).

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Claim 4 is rendered vague and indefinite by the phrase "wherein the infrared chromatogram of said antioxidant which is tabletted with potassium bromide shows that, there are..." . This phrase is unclear and confusing because claim 4 depends from claim 1 which does not define that the antioxidant is in the form of a tablet (containing potassium bromide therein) and claim 4 does not recite that the antioxidant further comprises potassium bromide nor that it is further in the form of a tablet - accordingly, the vague indefinite phrase "said antioxidant which is tabletted with potassium bromide" also lacks adequate antecedent basis. In addition, the comma symbol between the words "that" and "there" further causes the overall phrase to be unclear and confusing.

Claims 5-10 provide for the use of , but, since the claims do not set forth any steps involved in a method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

All other claims depend directly or indirectly from rejected claims and are, therefore, also rejected under USC 112, second paragraph for the reasons set forth above.

Claim Rejections - 35 USC § 102/103

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-10 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Zhang (CN 1228968 - CAPLUS & DWPI Abstracts) or Zhang (CN 1229131 - CAPLUS & DWPI Abstracts).

As readily admitted by Applicants (see, e.g., page 3, lines 16-22; and page 6, lines 3-14, of the instant specification), the instantly claimed product - as best understood (a bamboo leaf extract preparation having antioxidant activity), reads upon a bamboo leaf extract preparation developed in the 1990's by Zhang et al. (including in the form of a health beer) - as described in the above two cited Chinese patents (having Application Numbers 1998-104564 and 1998-104563, respectively - which Applicant refer to as ZL 98 1 04564.2 and ZL 98 1 04563.4, respectively, within the instant specification) - see CAPLUS & DWPI Abstracts. Consequently, the claimed bamboo leaf product appears to be anticipated by each of the cited Chinese patent references.

In the alternative, even if the claimed bamboo leaf product is not identical to the referenced bamboo leaf products with regard to some unidentified characteristics, the differences between that which is disclosed and that which is claimed are considered to be so slight that the

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referenced bamboo leaf products are likely to inherently possess the same characteristics of the claimed bamboo leaf product particularly in view of the similar characteristics which they have been shown to share. Thus, the claimed bamboo leaf antioxidant product would have been obvious to those of ordinary skill in the art within the meaning of USC 103.

Accordingly, the claimed invention as a whole was at least *prima facie* obvious, if not anticipated by the reference, especially in the absence of sufficient, clear, and convincing evidence to the contrary.

Claims 1-10 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Zhang et al. (Yingyang Xueba, 1998 - CAPLUS Abstract) or over Xu et al. (Yingyang Xueba, 2001 - CAPLUS Abstract).

Zhang et al. and Xu et al. each teach bamboo leaf extract compositions which appear to be the same as that instantly claimed (as best understood) including because each of the reference bamboo leaf extract compositions have strong antioxidant activity, and also because Zhang et al. further disclose that their bamboo leaf extract preparation contains abundant flavonoids (as instantly claimed/disclosed) and other bio-active substances therein, and Xu et al. further disclose extracting the bamboo leaves using a hot aqueous-ethanolic extraction solvent (which is consistent to the extraction technique instantly disclosed - see, e.g., page 6, lines 3-14, of the instant specification) - see CAPLUS Abstracts. Consequently, the claimed bamboo leaf product appears to be anticipated by each of the cited references.

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In the alternative, even if the claimed bamboo leaf product is not identical to the referenced bamboo leaf products with regard to some unidentified characteristics, the differences between that which is disclosed and that which is claimed are considered to be so slight that the referenced bamboo leaf products are likely to inherently possess the same characteristics of the claimed bamboo leaf product particularly in view of the similar characteristics which they have been shown to share. Thus, the claimed bamboo leaf antioxidant product would have been obvious to those of ordinary skill in the art within the meaning of USC 103.

Accordingly, the claimed invention as a whole was at least *prima facie* obvious, if not anticipated by the reference, especially in the absence of sufficient, clear, and convincing evidence to the contrary.

Claims 1-10 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Woo et al. (US 2006/078632).

Woo teaches bamboo leaf extract composition which appear to be the same as that instantly claimed (as best understood) including because the reference bamboo leaf extract composition comprises one or more of the instantly claimed compounds therein (see entire document including Figures). Consequently, the claimed bamboo leaf product appears to be anticipated by each of the cited Chinese patent references.

In the alternative, even if the claimed bamboo leaf product is not identical to the referenced bamboo leaf products with regard to some unidentified characteristics, the differences between that which is disclosed and that which is claimed are considered to be so slight that the

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referenced bamboo leaf products are likely to inherently possess the same characteristics of the claimed bamboo leaf product particularly in view of the similar characteristics which they have been shown to share. Thus, the claimed bamboo leaf antioxidant product would have been obvious to those of ordinary skill in the art within the meaning of USC 103.

Accordingly, the claimed invention as a whole was at least *prima facie* obvious, if not anticipated by the reference, especially in the absence of sufficient, clear, and convincing evidence to the contrary.

With respect to the art rejections above, please note that the Patent and Trademark Office is not equipped to conduct experimentation in order to determine whether Applicants' bamboo leaf product differs and, if so, to what extent, from those disclosed by each of the cited references above. Therefore, with the showing of the references, the burden of establishing non-obviousness by objective evidence is shifted to the Applicants.

In addition, please note that the intended use(s) of the instantly claimed product does not patentably distinguish the product, *per se*, since such undisclosed use(s) is/are inherent in the reference products. In order to be limiting, the intended use(s) must create a structural difference between the claimed product and the prior art products. In the instant case, the intended use(s) does/do not create a structural difference, thus the intended use(s) is/are not limiting. Please note that when applicant claims a product in terms of intended use and the product of the prior art appears to be the same, the Examiner may make a rejection under both 35 U.S.C. 102 and 103, expressed as a 102/103 rejection (MPEP 2112).

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Conclusion

No claim is allowed.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Please note that none of the references cited within the Information Disclosure Statement filed 08 April 2006 were provided therewith. Accordingly, these references (other than the CAPLUS & DWPI abstract teachings thereof, as cited within the enclosed Notice of References - PTO 892) have not been considered.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher R. Tate whose telephone number is (571) 272-0970. The examiner can normally be reached on Mon-Thur, 6:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terry McKelvey can be reached on (571) 272-0775. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Christopher R. Tate/
Primary Examiner, Art Unit 1655